THE FARM INDEX

June 1963

ECONOMIC RESEARCH SERVICE • U. S. DEPARTMENT OF AGRICULTURE

- INVESTMENT IN
  - Stronger Economies
  - Higher Income
  - Better Health
  - Political Stability
  - Bigger Markets

FOOD AID ABROAD

ECONOMIC TRENDS

Item	Unit or base period	'57-'59 Average	1962		1963		
			Year	April	February	March	April
Prices:							
Prices received by farmers	1910-14=100	242	243	242	242	240	242
Crops	1910-14=100	223	231	236	232	238	245
Livestock and products	1910-14=100	258	254	246	251	242	240
Prices paid, interest, taxes and wage rates	1910-14=100	292	306	307	311	310	311
Family living items	1910-14=100	286	294	295	298	297	297
Production items	1910-14=100	262	269	270	274	274	273
Parity ratio		83	80	79	78	77	78
Wholesale prices, all commodities	1957-59=100	.....	100.6	100.4	100.2	99.9	99.8
Commodities other than farm and food	1957-59=100	.....	100.8	100.9	100.6	100.6	100.4
Farm products	1957-59=100	.....	97.7	96.9	96.5	95.4	95.4
Food, processed	1957-59=100	.....	101.2	100.2	100.5	99.0	99.4
Consumer price index, all items	1957-59=100	.....	105.4	105.2	106.1	106.2	.....
Food	1957-59=100	.....	103.6	103.4	105.0	104.6	.....
Farm Food Market Basket:[1]							
Retail cost	Dollars	1,037	1,067	1,067	1,084	1,079	.....
Farm value	Dollars	410	410	409	399	393	.....
Farm-retail spread	Dollars	627	657	658	685	686	.....
Farmers' share of retail cost	Per cent	40	38	38	37	36	.....
Farm Income:							
Volume of farm marketings	1947-49=100	123	137	98	108	107	105
Cash receipts from farm marketings	Million dollars	32,247	35,749	2,153	2,331	2,273	2,254
Crops	Million dollars	13,766	15,900	615	877	722	642
Livestock and products	Million dollars	18,481	19,849	1,538	1,454	1,551	1,612
Realized gross income [2]	Billion dollars	.....	40.6	.....	.....	40.8	.....
Farm production expenses [2]	Billion dollars	.....	27.7	.....	.....	28.1	.....
Realized net income [2]	Billion dollars	.....	12.9	.....	.....	12.7	.....
Agricultural Trade:							
Agricultural exports	Million dollars	4,105	5,031	411	498	505	.....
Agricultural imports	Million dollars	3,977	3,876	313	374	353	.....
Land Values:							
Average value per acre	1947-49=100	.....	.....	118 [3]	.....	123	.....
Total value of farm real estate	Billion dollars	.....	.....	139.9 [3]	.....	146.2	.....
Gross National Product[2]	Billion dollars	456.7	553.9	.....	.....	545.0	.....
Consumption [2]	Billion dollars	297.3	356.7	.....	.....	350.2	.....
Investment [2]	Billion dollars	65.1	76.6	.....	.....	75.9	.....
Government expenditures [2]	Billion dollars	92.4	117.3	.....	.....	115.2	.....
Net exports [2]	Billion dollars	1.8	3.3	.....	.....	3.7	.....
Income and Spending:							
Personal income	Billion dollars	.....	440.5	438.3	451.1	452.7	455.8
Disposable income [2]	Billion dollars	321.3	382.9	.....	.....	375.6	.....
Total retail sales, seasonally adjusted	Million dollars	.....	19,613	19,673	20,452	20,424	20,178
Retail sales of food group, seasonally adjusted	Million dollars	.....	4,801	4,787	4,911	4,835	.....
Employment and Wages:							
Total civilian employment, seasonally adjusted	Millions	.....	67.8	67.6	68.1	68.6	68.9
Agricultural, seasonally adjusted	Millions	.....	5.2	5.3	4.8	5.0	5.0
Rate of unemployment, seasonally adjusted	Per cent	.....	5.6	5.6	6.1	5.6	5.7
Workweek in manufacturing, seasonally adjusted	Hours	.....	40.4	40.8	40.3	40.4	40.3
Hourly earnings in manufacturing	Dollars	.....	2.39	2.39	2.43	2.44	2.45
Industrial Production, seasonally adjusted	1957-59=100	.....	118	118	119	121	122
Manufacturers' Sales and Inventories:							
Total sales, seasonally adjusted monthly rate	Million dollars	.....	33,260	33,480	34,090	34,270	.....
Total inventories	Million dollars	.....	57,210	56,690	57,690	57,840	.....
Total new orders	Million dollars	.....	33,050	32,730	34,590	34,790	.....

[1] Average annual quantities of farm food products based on purchases per wage-earner or clerical-worker family in 1952—estimated monthly. [2] Annual rates seasonally adjusted first quarter. [3] As of March 1.

Sources: U.S. Department of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Economics and Farm Real Estate Market Developments); U.S. Department of Commerce (Industry Survey, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Department of Labor (The Labor Force and Wholesale Price Index).

THE AGRICULTURAL OUTLOOK

Little change from 1962 is prospect for farmers' cash receipts from marketings this year.

Receipts from crops may total a shade above $15.9 billion received in 1962. Crop prices in January-April were 2.5 per cent above year earlier . . . but may be less favorable as new crops become available. Increased receipts anticipated from wheat, tobacco, soybeans and fruit likely will be offset by smaller takings from cotton and vegetables.

Receipts from livestock and products are expected around $19.8 billion received in 1962. Livestock prices in January-April were about 2.5 per cent below year earlier . . . are expected to continue under. Volume of marketings will be greater than last year.

Government payments to farmers this year will increase over 1962, possibly a tenth. Price supports for some crops are slightly above 1962. Supports for some grains include payments-in-kind, permitting lower market prices for some crops, especially wheat, while maintaining income to farmers.

Realized gross income of farmers this year likely will be just above $40.6 billion in 1962. However, prices farmers pay for production items, family living, hired labor, interest and taxes are continuing rise.

Parity ratio dipped to 77 in March, lowest since December 1959, rose to 78 in April. But ratio for 1963 is expected below 80 average of past four years. Farm production expenses are rising a little further this year.

Realized net farm income in 1963 is forecast almost as high as $12.9 billion in 1962. Allowing for continued decrease in number of farms, realized net income per farm probably will remain around record high $3,500 of 1962.

Business conditions continued improving in late spring. Production rose sharply in most industries. Employment continued to increase slowly, as did labor force. Rate of unemployment was unchanged from winter and about equal to 1962 average. April auto sales were record for month . . . remained strong in May. Total April retail sales, however, were somewhat less than all-time record in previous month.

Construction spending picked up somewhat in March but rose only seasonally in April. Construction activity in late spring was around average level for 1962. Public construction was lagging . . . but residential activity increased substantially from relatively slow February-March pace.

Businessmen now plan to spend $40 billion for plant and equipment in 1963, according to McGraw-Hill Publishing Co. spring survey, about 7 per cent more than actual spending in 1962. This compares with $39 billion indicated by Securities Exchange Commission-Commerce Department survey in late January.

During remainder of 1963, economic activity likely will continue advance, through at slower pace

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than during last six months. Consumer spending, business outlays for plant and equipment, Government expenditures are expected to continue rise.

COMMODITY HIGHLIGHTS

Red **meat** production in first half of 1963 likely will be 4 to 5 per cent above year earlier. First-quarter production totaled 7,241 million pounds . . . 3 per cent above year earlier because of more slaughter of fed cattle and hogs. Pattern probably will continue through second quarter. Fed beef production during April-May was running above first quarter, considerably above last year. Pork production is declining seasonally, but will remain above year earlier through second quarter. Lamb and veal supplies will be down seasonally and under year earlier during quarter.

Result of increase in meat supplies is lower prices for fed cattle and hogs. Fed cattle prices probably will recover somewhat during latter part of year . . . volume of fed beef production during late summer and fall is expected to be down seasonally from peak in late spring and early summer. Prices received by farmers for hogs likely will increase seasonally to peak in August . . . but likely will be a little under last August average of $18.50 at eight markets. Lamb prices in mid-May were about $2 above year earlier, are expected to hold above rest of year.

Milk production in April was 0.7 per cent below April 1962—after averaging 0.9 per cent below year earlier in first quarter. Cow numbers in first quarter were down about 2 per cent from year ago . . . production per cow rose about 1.5 per cent over same period of 1962.

April price of all wholesale milk was $3.87 per 100 pounds compared with $3.90 in April 1962 . . . expected to continue close to year earlier levels during third quarter. Despite milk-feed price ratios substantially below those of 1961 and early 1962, increased levels of grain feeding are occurring.

Total consumption of dairy products this year is expected to rise above the 116.4 billion pounds of milk equivalent consumed in 1962. Larger population accounts for gain . . . consumption per person likely will be lower than 637 pounds of milk equivalent last year. However, sales of whole milk in comparable Federal order markets in January-February were about 2 per cent above year earlier.

Egg production in first four months of 1963 was 2 per cent lower than year earlier. Egg prices to producers, at 35.6 cents per dozen, averaged 3 per cent higher. Because of sharp break in egg prices in Easter trading period, USDA on April 12 announced dried egg program to help remove seasonally excessive supplies from market.

Number of poults hatched for this year's **turkey** crop—from last August through April—was up 2 per cent from same months year earlier.

Broiler supplies at midyear probably will be greater than year earlier because of increased hatchery activity in second quarter.

The 1964 wheat program failed to receive the necessary two-thirds approval. The alternative program which provides price support at 50 per cent of parity for compliance will be in effect.

Voluntary acreage diversion program, along with severe winter conditions and drought in Southwest, point to below average 1963 **wheat** crop. Exports in 1962-63 are expected to reach 615 million bushels. July 1, 1963, carryover may be 1,180 million bushels, 125 million under year earlier.

Feed grain disappearance in first half of 1962-63 was practically same as record in similar period of 1961-62. Sharp increase in domestic use in January-March more than made up for smaller consumption in October-December compared with year earlier. Domestic use in October-March was slightly higher than in same period of 1961-62.

Exports of feed grains in January-March dropped below heavy movement in that quarter last year. October-March exports totaled 8.1 million tons, slightly less than in first half of 1961-62.

Carryover of feed grains into 1963-64 is expected to total about 61 million tons, 11 million less than year carrier.

Feed prices in April continued higher than year earlier, with prices of feed grains averaging 4 per cent higher and high protein feed up 6 per cent.

Farmers signed up to divert 25.7 million acres from feed grains to soil-conserving uses this year —about 3 million acres less than actually diverted in 1962, slightly more than in 1961. More base acreage is in program this year than in 1962 . . . but average per cent diversion is less.

SURPLUS DAIRY PRODUCTS LEAD VARIED LIFE

Government purchases of dairy products provide a way of removing surpluses from normal channels of trade. These purchases have helped bring some improvement in incomes of dairy farmers as well as in the diets of many needy persons here and overseas.

Price support and purchase of dairy products go back to 1933. Beginning late in that year and continuing into the early war period, butter, cheese, evaporated and nonfat dry milk were bought by the Department of Agriculture. During this period, purchases were closely keyed to specific school lunch, institutional and relief programs. Most of the time, they amounted to less than 1 per cent of total milk production.

In 1941, when the U.S. went to war, demand for dairy products boomed. From 1940 to 1948 the dairy problem was to meet the stepped up requirements of lend-lease, aid to our allies and postwar foreign assistance. During wartime, minimum prices for all dairy products were in effect.

In 1948 foreign requirements dropped off. The Agricultural Act of 1948 was enacted with price supports at 90 per cent of parity through 1949. Stocks of dairy foods built up in 1949, and the Commodity Credit Corporation started buying butter, cheddar cheese and nonfat dry milk. Dairy support purchases averaged 3 billion pounds (milk equivalent) in 1949 and 1950.

Under the Agricultural Act of 1949 price supports for milk and butterfat have ranged between 75 and 90 per cent of parity since 1950. The act is also the authority for CCC purchase and disposal of dairy products.

In 1951-52 military action in Korea again increased demand for dairy products, so CCC inventories dropped. Beginning in 1953, however, milk production began to climb and substantial amounts of government-purchased dairy products were shipped abroad.

About 90 per cent of CCC purchases during the entire 1949-62 period have been consumed; the remainder is in uncommitted stocks.

Here is how these products have been used: Most of the CCC nonfat dry milk has been exported. Some butter has been distributed in this way too, although the bulk has been used in domestic welfare and school lunch programs. CCC cheese has been used almost equally here and overseas.

Additional amounts of government-purchased dairy foods are used by U.S. military agencies and the Veterans' Administration. Each year since 1953 servicemen have consumed about 27 million pounds of butter, 2 million pounds of cheese and slightly less than 1 million pounds of nonfat dry milk from government stocks. About two-thirds of this utilization is for use in addition to normal purchases, with the rest sold at export prices overseas.

In 1954 the Agricultural Trade and Assistance Act, commonly called Public Law 480, took effect. This legislation has encouraged exports of CCC stocks because it authorizes payment of processing, packaging and transportation costs for welfare donations. P.L.

480 also permits sales for foreign currency and barter and provides for long-term credit when needed. The Act includes provisions for famine relief and other emergency programs.

During January-June 1962, dairy products from government stocks went to about 16 million school children, 1.4 million needy persons in institutions and about 7.4 million persons in needy families within the United States. These CCC supplies of butter, cheese and nonfat dry milk donated domestically in 1962 were over 5 billion pounds (milk equivalent), more than 4 per cent of total dairy product consumption.

The National School Lunch and Special Milk programs have been the chief outlets for fluid products under government assistance. During the 1962-63 school year, students in grade and high schools are expected to use about 2.8 billion pounds (milk equivalent) of fluid dairy products. This will be about 2.3 per cent of the milk marketed during the period. Federal funds are used to partly reimburse schools for fluid milk purchased locally.

Foreign donations of surplus foods including dairy products during the first half of 1962 were made in 109 countries and territories to an estimated 68 million needy people. The number who were fed with U.S. food surpluses was up over a fourth compared to the same period in 1961.

Distribution of dairy products and other food overseas is through 17 voluntary welfare agencies such as CARE and church affiliated groups. The United Nations Children's Fund has been the principal intergovernmental agency in this field.

Although small in proportion to the other programs, export sales of CCC dairy products were a little larger in 1962. Mostly for dollars, export sales took 7 per cent of all CCC butter utilization, 8 per cent of the cheese and 24 per cent of the nonfat dry milk. *(1)*

INDEXES OF CITRUS PRODUCTION AND PRICE ARE UPDATED

The indexes of citrus production and prices, maintained by the Economic Research Service, have been updated from a 1935-39 to a 1957-59 base. Citrus fruits included are oranges, grapefruit, lemons, tangerines and limes.

The new indexes provide a more accurate picture of what has taken place in the citrus industry since 1935. They should also be a better base for portraying future trends in production and prices.

The revision gives more weight to oranges and less to grapefruit, reflecting production trends. Limes are included in the 1957-59 figures—they were left out of the earlier ones.

Use of the new data shows the index of production moved up rather sharply from 1937 to 1946 and has been slowing since then. Year to year changes in output usually were small.

In contrast, the generally upward trend in prices made some wide year to year changes. As was expected, fluctuations in prices frequently took the opposite direction from production changes. Overall, the trend in citrus prices pretty much follows the growth in consumer income over the period. *(2)*

More Beef Cattle, Hogs and Broilers on Feed in 1961-62 Help to Boost Grain-Consuming Animal Units Over 168 Million

The number of grain-consuming animal units in the feeding year ending October 1962 was over 168 million, up about 1 million from 1960-61. This was mainly the result of more beef cattle and hogs on feed in 1961-62 than in the previous 12 months.

Broilers accounted for slightly more animal units in 1961, too. However, units from chickens raised last year dropped about 9 per cent from 1960 and about 13 per cent fewer units were contributed by turkeys.

Animal units are a measure of livestock and poultry numbers weighted by feed consumption compared to the feed consumed by a milk cow. Four series include the following feed classifications —concentrates, roughages including pasture, all feed including pasture and high-protein feeds.

The livestock numbers used in setting up animal units take in all livestock and poultry on farms January 1 of the feeding year and all those raised during the year.

About 1.6 million more roughage-consuming animal units were fed in 1961 than in 1960. Beef cattle units helped boost this figure to over 97 million.

Grain and roughage-consuming animal units moved up about 1.3 million over the 1960 feeding year during 1961-62. The major users of roughages, beef cattle, increased the most but hogs, the heavy grain consumers, also went up. Unit numbers of poultry and milk cows both dropped somewhat.

Concentrates fed per grain-consuming animal unit have been steadily climbing since the 1940s. In the 1941 feeding year 0.7 ton of concentrates was fed per animal— during 1961, the figure was 0.9 ton. This increase was due in part to favorable prices for feeder and slaughter cattle in comparison to feed prices which have made it profitable to feed livestock to heavier weights during most of the past 20 years.

High-protein animal units are based on consumption of oilseed meals and other high protein feeds. Although the number of these units has been rather stable, the amount available per unit last year was double the supply in 1940. *(3)*

Survey of Low-Income Community Tells Who's Hired in New Factory

When a new industry moves to a low income community, who gets the jobs? Researchers who studied one such community in Mississippi found a new employee was typically a man, about 28 years old, married and with a family. In comparison, the average age for other white rural household heads in the same county was 54 years.

As was to be expected, the plant worker earned more than his neighbor who farmed or was employed elsewhere in the community. Half of the men who went to work in the new factory had family incomes of at least $3,000 from all sources as compared to only one-fifth of the white rural household heads. Roughly a quarter of the plant employees also farmed on the side.

In good part because he was younger, the plant worker had more education than the average rural resident. Most of the factory employees interviewed had completed at least the eighth grade; fewer than half the rural people in the county had as much schooling.

The plant workers were also more willing both to move from place to place and to change jobs than other country people. About half of the plant workers had changed jobs four times or more, while over half of the rural people had held the same job all their lives.

The researchers also asked the workers if their new jobs had changed their participation in community organizations such as churches, social clubs, fraternal groups, PTAs and the like. The results indicated their new jobs had little effect on such memberships.

The research was carried out in cooperation with the Mississippi Agricultural Experiment Station. *(4)*

Lightning Lo$$e$

Loss of farm property from fire and lightning amounted to about $163 million in 1961—roughly one-seventh of the annual fire loss for the nation. The damage included loss of farm buildings, machinery, livestock, crops stored in buildings and personal property such as household goods.

Estimates are that some $33 million of the loss resulted from lightning with or without fire. Much of such loss could have been prevented with effective use of lightning rods.

About a fifth of the fire-claim dollars paid by farm mutual insurance companies in recent years was chargeable to lightning. *(5)*

Government Sponsors Three Programs To Aid Rural Areas' Development

Depressed areas in the United States can stimulate their economy by greater participation in three government-sponsored programs.

The programs, already available but not fully used, are: The National Vocational Education Acts, the Area Redevelopment Act, and the Manpower Development and Training Act.

The National Vocational Education Acts, although not directly related to easing unemployment, provide specific training on a high school level in agriculture, industry and home economics. Under this program, area vocational schools, already established in a number of states, permit a wider range of training courses to a larger number of rural persons.

The Area Redevelopment Act of 1961 offers training that relates to an overall economic development plan. Once an area is eligible for benefits, rural residents are entitled to sixteen weeks of training at government expense.

The South participates in this program much less than other areas. As of June last year, of the 9,074 persons who received training, only 800 were in the old South —Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas and Virginia.

The Manpower Development and Training Act of 1962 provides individual training. Applicants must be unemployed or in farm families with net annual incomes of less than $1,200. But—the training must be directly related to the job openings in the local labor market. Although the program is nationwide, as of December 1962, only 16 per cent of the training requests came from the South. More of the 700,000 persons eligible for training are in Southern states than in all other areas. *(6)*

Here's How:

Like to know how to adjust bushels of corn for moisture content? It's fairly simple with a conversion table.

Suppose your bin contains 691 bushels of new ear corn (shelled basis) with a moisture content of 23 per cent. The factor for such a moisture content is 0.91. This figure times 691 bushels rounds out to 629 bushels (shelled basis). *(7)*

Moisture content	Factor
Per cent	
15 or less	1.030
16	1.015
17	1.000
18	0.985
19	0.970
20	0.955
21	0.940
22	0.925
23	0.910
24	0.895
25	0.880
26	0.865
27	0.850
28	0.835
29	0.820
30	0.805
31	0.790
32	0.775
33	0.760
34	0.745
35	0.730

Utilization of Corn Crop as Grain Speeds Move to Picker-Shellers

More than 88 per cent of all corn harvested in the United States in 1961 was used for grain. The remaining 12 per cent was harvested for silage, hogged or grazed off, and cut for forage. In the Corn Belt states the proportion of corn acreage for grain was even higher—96 per cent.

Field-shelled corn can be stored on the farm as rolled, ground or chopped high-moisture corn for feed. Field shelling is growing in importance as a harvesting method.

In the Corn Belt, for example, field shelling jumped from 2 per cent of the harvest in 1956 to 14 per cent in 1961.

Drying shelled corn mechanically and storing high-moisture shelled and ear corn also are becoming more important each year. Of the total shelled corn harvested in the Midwest in 1961, about half was dried mechanically on the farm, 30 per cent was stored as high-moisture shelled corn and 20 per cent was sold from the field.

Before choosing a new pattern of harvesting and storing, the farmer should consider: his original investment for harvesting equipment; annual fixed costs—depreciation, interest and taxes; and operating costs—fuel, labor and repairs.

Each farmer has his own set of problems.

Some points to think about in making the choice are:

—Replacing or constructing additional ear-corn cribs is a money saving practice especially where the volume of corn is small.

—Planning the harvesting system from harvest through final use, whether sold directly from the field or fed to livestock, gives a clearer view of the overall system.

—Comparing harvesting methods by the average field losses for the season, not the extremes that occur during late season harvesting, shows more realistic results.

—Costs for storing dry shelled corn are less than half the cost of staring ear corn.

—Building structures for storing high-moisture ground ear corn are about 1.5 times the cost of buildings for high-moisture shelled corn.

—Drying in batch-bins is the most inexpensive system at all volumes. *(8)*

Capital Invested in U.S. Agriculture Reaches a Total of $160.5 Billion

Capital in farming in 1962 totaled $162.5 billion for the United States; averaged $47,632 per farm and $23,259 per farm worker.

Comparable figures for 1950 were $93.9 billion, $17,193 and $9,430.

At about the same time, from 1949 to 1959, capital assets per dollar of net farm income almost doubled—rising from $6.87 to $11.54.

Farm capital includes all the financial resources and all goods and services used in farming except the farm family's labor.

Biggest part of farm capital is investment capital—money tied up in land, machinery and other property used more than a year. The remainder is working capital, money or property used up within a year.

Increase in farm real estate value accounted for nearly $60 million of the $68.6 billion increase in farm capital. *(9)*

HOW CAPITAL ASSETS PER FARM GREW FROM 1950 TO 1962

Capital Assets	1950	1962
	Dollars	Dollars
Real estate	11,961	37,101
Machinery	1,756	4,310
Livestock	2,283	4,426
Feed and working capital	1,193	1,795
Total	17,193	47,632

1962 Net Returns for Corn Belt Show Gain for Hog-Beef Feeders

Here's how 1962 costs and returns shaped up for farmers in the Corn Belt.

Hog—Dairy Farms: These farmers had net returns of $5,394 last year, compared to $5,972 in 1961. Gross incomes were unchanged but higher operating costs ate them up faster. The cost of feed, power, machinery and taxes increased the most.

Crop yields were higher for hog-dairy producers in 1962.

Prices received for milk were around the lower support price.

Hog Fattening—Beef Raising Farms: On farms where hogs are fed out and a cow-calf beef enterprise is operated, net incomes dropped from an average of $4,042 in 1961 to $3,616 last year. Gross farm income was up $200 but total expenses increased $600.

Drought reduced crop yields on these farms while prices were near 1961 levels. The exception was cattle prices; they averaged 1 per cent more than in 1961.

Hog—Beef Fattening Farms: Producers who fatten hogs and feeder cattle reported incomes averaging $10,183 in 1962. Their returns were $7,393 in 1961.

These farmers were lucky in getting a favorable margin between what they paid for feeder cattle and what they received for fed cattle. Consequently, gross returns were more than enough to cover a one-fourth increase in 1962 operating expenses.

Cash Grain Farms: Larger receipts from corn and soybeans on cash grain farms during 1962 were about wiped out by a 9 per cent increase in production costs. As a result, the $9,061 returned to these farmers last year was near the $8,995 in 1961 net income.

Prices for soybeans slipped to support levels. Prices were unchanged for corn and oats and higher for wheat. *(10)*

Value of Machinery Per Worker Goes Up 10 Times in Two Decades

The farm shed is loaded with money. Not the green stuff, but an array of costly machinery. And the amount of cash represented in the farmer's equipment shed continues to climb.

Average investment in farm machinery per worker has increased tenfold within the past 20 years. Nowadays, it's nothing for a family farmer with a going operation to have at least $10,000 tied up in equipment alone.

Take a typical dairy farm. The list of machinery needed is staggering. Tractor, at least one. Plow. Disc. Harrow. Corn planter. Grain drill. Grass seeder. Fertilizer spreader. Sprayer. Cultivator. Manure spreader, and possibly a loader too. Baler. Combine. Forage harvester. Corn picker. Wagons. Elevator. Silo filling equipment.

Aside from the tractor, the most expensive items on the list are the harvesting machines—the combine, forage harvester and corn picker. Not only is the price tag high, but the machines are used only a few days out of the year. However, harvesting must be on schedule in order to produce a quality crop. So, despite the expense, many farmers buy their own harvesting equipment.

Farmers have several ways to hold machinery costs down. Many start out with used equipment. Often neighbors will share machinery and work together during peak periods. Or the farmer can hire a custom operator.

Besides these cost saving methods, machinery dealers and farmers are getting interested in the possibility of renting farm equipment. The dealer can realize something on his otherwise idle machinery, while the farmer can lower his machinery costs per acre.

In a typical rental contract, the customer is responsible for rental charges, the cost of getting the machinery to and from the dealer, and lubrication, fuel and supplies while the machine is used. In return, the dealer agrees to provide the equipment in good operating condition and may carry liability insurance to cover injury and property damage.

Rental rates suggested by the national organization of farm equipment dealers run 1 per cent of the retail price for a new machine for a 10-hour day. The rates go down slightly as the time in use goes up.

The big "if" in renting machinery is whether the equipment can be obtained when it is needed.

Despite some disadvantages, renting machinery has a lot in its favor. From the farmer's standpoint, no insurance or depreciation expenses are involved. There is less maintenance and no servicing or housing is needed.

Also, the farmer can invest the money that isn't tied up in machinery in items that generally have a higher rate of return. *(11)*

New Milk Records

Cows give more milk today than ever before. Last year's milk production of 7,370 pounds per cow topped 1961's record high by 147 pounds.

Production of milk per cow in 1962 was highest in California —10,330 pounds. New Jersey came next with 9,280 pounds of milk per cow. Mississippi was at the bottom of the scale—3,780 pounds per cow.

In the first quarter of 1963, milk output per cow in the U.S. continued to increase, but at a lower rate than in 1962.

Total milk output in the United States last year was 126 million pounds—the highest on record. Although the numbers of cows declined almost 2 per cent from 1961 to 1962, total milk production rose because of increasing output per cow.

The five leading states in 1962 milk production were: Wisconsin, New York, Minnesota, California and Pennsylvania. *(12)*

Cotton Acreage and Output Drop As Yield Goes Up; Regions Shift

Since the end of World War II, there has been a four-way change in U.S. cotton production.

Acreage harvested has been on a downward trend, yield per harvested acre has gone up, production has declined slightly and regional shares of output have shifted noticeably.

Between 1947 and 1962, acreage harvested generally declined throughout the Cotton Belt although wide year to year changes took place. In 1947, a crop of 11.9 million bales was produced on 21.3 million acres. The 1962 crop of 14.9 million bales was harvested on 15.6 million acres. However, the 1962 crop was out of line with the long-term production trend.

The downward trend in cotton harvested partly reflects governmen programs to control or reduce acreage, principally the Cotton Acreage Allotment program. Sign-up for such programs as the Soil Bank and the Conservation Reserve was particularly strong in the Southeast.

Acres allotted for cotton went down during the last 15 years, dropping from 21.4 million in 1954 to 17.4 million in 1959.

By regions, allotments increased a little in the West and declined in the other three cotton areas.

Yields per acre in 1947 were 267 pounds—the postwar low. The 1962 figure was 457 pounds compared with the 1958 average of 466 pounds per acre. Yields increased in all the cotton production regions during the period.

Two areas dominated regional shifts in production. The share of the crop produced in the West went from 10 per cent in 1947 to 20 per cent in 1962 while the Southeast dropped from 23 to 13 per cent.

Output shares for the Delta and southwestern states stayed about the same. *(13)*

Young Dairy Farmer Starting Out Faces an Uphill Struggle But Probably Will Make More Money If He Rents His Land

If the young farmer can resist the temptation to own his land when he starts out, the odds are in favor of his making more money in the long run. But whatever choice he makes, his career will not be easy.

These points are underlined in a recent study of Wisconsin dairy farms. The report, a cooperative project of the University of Wisconsin and the Economic Research Service, focused on 109 dairy farms that had been operated by the same families during the 1950-60 period.

The study showed that the man who owned his farm from the beginning increased his income less than the man who began by renting or sharing the ownership of his land. He was also more apt to end up on a small farm than the man who rented. The tendency held as true for the man who began on a large farm as for the man who started on a small one.

With his money tied up in the land right from the beginning (or with large mortgage payments), the owner had too little capital left over for the machinery, additional livestock and other improvements he needed to keep up with new technology, let alone to increase his income.

There may be another reason that owning the farm right at the start is a drawback. It lies in the realm of psychology rather than strict economics.

When a man starts farming as a renter he is less committed to the size of his operation. Unlike the owner, he can better afford to look at the size of his farm as a variable, to be changed in response to new opportunities.

Whatever the cause, the results are all in favor of the renters. The men who started out owning their farms averaged $6,720 in total value of farm sales in 1960. The men who began by renting or sharing ownership of the land averaged $9,426.

Once the young man gets going, however, the averages revealed by the study suggest he will eventually own his place, though he will probably continue to rent some land to expand his enterprise.

During the 10-year span of the study, the number of operators who were full owners of their farms increased substantially; the number of full renters declined. In the same period, there was an increase in the number of part-owners. Even farmers who had been in business for at least 10 years found part-ownership a useful procedure.

The young farmer will, in fact, probably find that he has to expand his enterprise if he expects to stay ahead. Most of the farms in the study were bigger at the end of the 10 years than at the beginning of the period. They were also more specialized. In 1950, some 50 of the 109 farms had more than two major enterprises. The figure dropped to 30 by 1960.

As the farmers increased their operations, they bought more machinery, relying more heavily on credit to buy it. From 1951 to 1955, only 15 per cent of all farmers in the sample bought major items of machinery and equipment on credit (items worth $200 or more). In the last five years of the decade, the proportion increased to 25 per cent.

Cash expenses in general are also on the upswing in farming. During the 1950s, cash expenses increased faster than the total value of sales, despite the larger size of the farms.

The top third of the farmers, for instance, narrowed the gap between their per capita income and the per capita income of Wisconsin as a whole, but only proportionately. The absolute dollar difference widened during the 10 years.

Not surprisingly, nonfarm jobs became increasingly important over the decade as the farmers tried to maintain their incomes. In 1950, 20 of the 109 farmers had nonfarm work; by 1960 some 29 farmers added to their incomes by taking additional jobs. *(14)*

HOG FARMS FARROW MORE LITTERS AND SELL MORE HOGS

Hog farms are getting larger. According to the data from the Census of Agriculture, both the number of litters farrowed and the number of hogs sold per hog farm has been increasing steadily.

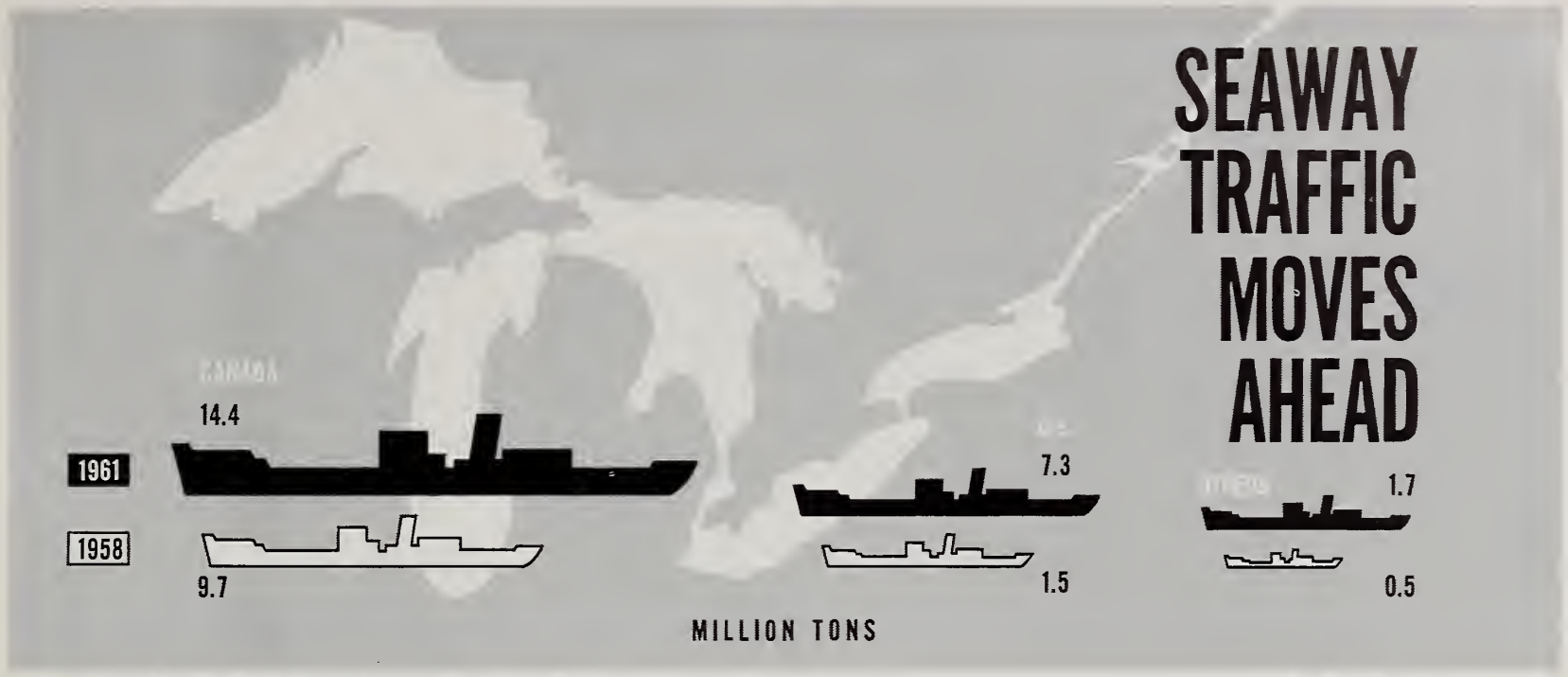
In 1954, only 29 per cent of U.S. hog farms reported farrowing 10 or more litters. In 1959, 35 per cent of all hog farms farrowed at least 10 litters. Of this total, 19 per cent farrowed 10 to 19 litters, 12 per cent 20 to 39 litters, 3 per cent 40 to 69 litters and 1 per cent 70 or more. The 1959 average for all hog farms was 14 litters farrowed.

More farms are farrowing litters in the fall months, too. Fall farrowings were 39 per cent of the litters in 1954; in 1959, they were 44 per cent.

The number of hogs marketed per farm has been increasing along with farrowings. On the average, farmers sold 64 hogs in 1959 compared to only 40 in 1954.

The Corn Belt remains the dominant farm region in hog production—four-fifths of all hogs were farrowed on farms in the North Central states in 1959.

Corn Belt producers led in sales of hogs, too. In 1959, 89 per cent of the North Central hog farmers sold 10 or more hogs. In other regions less than two-thirds of the farms sold more than 10. *(15)*



Built jointly by the United States and Canada,
the improved St. Lawrence Seaway
has increased traffic of both nations since its 1959 opening.
Such bulk farm commodities as grains
account for most of the tonnage gain to date

The four-year-old St. Lawrence Seaway is not yet carrying the volume of traffic planners expected. But it has diverted many export shipments of grain and other bulk farm commodities from Atlantic ports. In some cases Gulf and Pacific ports have also felt the Seaway's competition.

A new ERS study shows that Great Lakes ports in 1958, the year before the waterway opened, handled only about 4 per cent of all U.S. exports of grain, our best agricultural seller abroad. Atlantic ports that year handled almost 25 per cent of all grain exports.

By 1962, with total U.S. grain exports much higher, nearly 18 per cent of all shipments moved via the Seaway, while the share handled by Atlantic ports had fallen to 13 per cent.

For nearly a century U.S. and Canadian planners debated the feasibility of an inland waterway that would give large ocean-going vessels access to Great Lakes ports, some 2,000 miles from the sea. Finally in 1959 the two countries, at a total cost of $471 million, opened the St. Lawrence Seaway.

The water route itself is not new. Small ocean-going ships with cargoes limited to 1,800 tons had used the system since 1932 when Canada completed the 27-mile Welland Canal connecting Lake Erie and Lake Ontario.

The new Seaway is an improved 200-mile stretch of the St. Lawrence River between Lake Ontario and Montreal. Seven new locks have replaced 22 smaller ones of the old waterway, and river channels have been dredged to a minimum depth of 27 feet.

Now the waterway can handle ocean-going vessels with a capacity up to 9,000 tons and specially designed lake-ocean ships of 15,000 tons capacity. Carriers with a capacity of 22,000 tons can move out of the upper gates.

Before the Seaway was opened, the joint U.S.-Canadian Tolls Commission estimated that 25 million tons of cargo would move on the Seaway the first year and that a capacity tonnage of 50 million would be reached by 1968.

Actual tonnage in 1959 was almost 5 million tons short of the expected tonnage, a volume that was reached only in 1962. At this rate of increase, it doesn't look like the 50 million ton estimate will be reached by 1968. If not, among other measures the Commission may have to raise tolls to pay off Seaway costs in 50 years as originally planned or extend the repayment period to 75 years.

There are several reasons for the Seaway's relatively slow start. Bad weather cut short the first operating season. Crews unfamiliar

SHIFT IN PORTS: Grain inspected for export shows Great Lakes shipments have jumped since the improved St. Lawrence Seaway was opened in 1959. Grain traffic from Atlantic and Pacific ports has declined. Other factors have helped to double grain exports from Gulf ports.

Ports	1958	1959	1960	1961	1962
	1,000 tons				
Great Lakes	841	3,452	3,971	4,536	6,275
Atlantic	5,051	4,824	4,995	5,350	4,737
Gulf	10,027	11,769	13,459	18,318	20,157
Pacific	4,588	4,315	5,836	5,235	4,375
Total	20,507	24,760	28,261	33,439	35,544

Grain exports include wheat, corn, oats, barley, rye, flaxseed and soybeans. Great Lakes shipments include grain to Canada.

with the waterway may have caused the long delays at locks and in the canals and channels. Labor troubles have upset shipping schedules at many ports. Some Great Lakes ports haven't been able to handle the larger ocean-going vessels. Expected cargoes have not materialized at some ports. And foreign vessels have not always allowed enough time for delays which have cut down on the number of round trips through the Seaway.

Then too, economic recession and a prolonged strike in the steel industry, factors affecting the nation as a whole, have also held down the volume of cargo moving on the Seaway.

ST. LAWRENCE TRAFFIC: Three-fourths of all Seaway cargoes are bulk commodities—farm products (mostly grain), iron ore, petroleum, coal and coke. Agricultural tonnage has more than doubled since new locks and deeper channels opened the waterway to larger vessels in 1959.

Cargoes	Traffic		Per cent of total	
	1958	1961	1958	1961
	1,000 tons		Per cent	
Agricultural commodities	4,921	11,148	42	48
Iron ore	1,526	4,017	13	17
Crude petroleum and products	1,009	1,542	8	6
Coal and coke	1,071	1,324	9	6
Other	3,235	5,387	28	23
Total	11,762	23,418	100	100

Since 1959, four groups of bulk commodities—farm products, bituminous coal, iron ore and petroleum—have accounted for three-fourths of all tonnage shipped on the Seaway. Agricultural tonnage has increased each year, but traffic in the other three commodities since 1959 has held fairly steady at a level somewhat above 1958, the last pre-Seaway year. Some 85 per cent of agricultural tonnage is grain, most of it bound for foreign markets.

The Seaway has brought major changes in the transportation pattern of U.S. grain exports. Before the improved waterway opened, most grain destined for European markets from the Central states moved by rail or rail and water to Atlantic ports for export. Now grain can be loaded at Great Lakes ports, much closer to the producing areas, for direct shipment to Europe.

Atlantic ports felt the Seaway's competition almost at once. In May 1958, grain inspected for export at Atlantic ports totaled 381,000 tons; 12 months later tonnage had dropped to 299,000 tons. Only 54,000 tons of grain were inspected at Lake ports in May 1958; the figure had jumped to 487,000 tons a year later.

Gulf ports, anticipating Seaway competition, have improved port facilities and waged a vigorous campaign to lure the traffic. These efforts, coupled with low barge rates down the Mississippi, have helped Gulf ports actually increase their share of grain exports from 48.9 per cent in 1958 to 56.7 per cent in 1962.

As for Pacific ports, competition from the Seaway has been less direct. In 1958, the 11 big Pacific ports handled 22.4 per cent of our export grain; in 1961 they handled only 15.6 per cent. But the decline is probably due mostly to lower freight rates from production areas to Gulf and Great Lakes ports, as well as the shift in foreign markets. *(16)*

Analysis of Different Sources of Contamination in Raw Wool Takes the Blame Off Jute Fibers Coming From Burlap Bags

The sheep rancher and wool processor are ganging up on contaminated wool.

A recently completed study of burlap bags, which can shed their jute fibers into the wool, showed that the bags are not quite the villains they were supposed to be.

The research, conducted by ERS at the behest of producer and processor groups, suggests that a comprehensive quality control program might have higher priority than merely improving the bags for sheared wool.

Wool is a remarkable fiber. It keeps out the winter cold and, as the bedouin has known for millenia, can ward off the sun's rays in extremely high temperatures. It has the added advantage of being popular in ordinary suits, jackets and coats.

Unfortunately for wool there are plenty of synthetic fibers that can and do compete for the attention of the clothing manufacturer and the consumer's dollars. The synthetics have some virtues of their own. For one, the synthetics are produced in an almost laboratory environment. The result is a product with strong visual—and sales—appeal because of its purity and lack of nature's induced defects.

The sheep is not so fastidious. It wanders through the fields gathering bits of grass in its fleece. It picks up stones and dirt and pieces of wire as it goes along. The rancher brands its wool with painted letters that are hard to remove.

The twigs, the stones, the bits of grass and twine, the painted patches on the fleece, the dirt and its own sweat and oil all add up to 30 to 80 per cent of the weight of the greasy wool when it is delivered at the factory.

The manufacturer tries his best to remove these extraneous odds and ends. He has a procedure to take out all the alien elements with the exception of the vegetable fibers that behave almost like wool.

These fibers scour like wool, spin like wool, weave like wool. But they don't dye like wool.

Wool, a protein structure, reacts one way to dyes. Vegetable fiber, a cellulose, is unaffected or turns a different hue. The difference is obvious and ruinous in the finished goods.

The processors can and are doing everything their margin allows to rid the fabric of the alien fibers. One process is to carbonize the vegetable fibers by running the cloth through an acid bath. The now brittle vegetable fibers can then be crushed and brushed away. The method works, too, for chaff, or burrs or straw. But jute fiber is tough; an acid strong enough to attack the jute also damages the wool.

The solution would seem to be obvious: eliminate the burlap and thus eliminate the jute. It would be a good answer too, even though special bags would be expensive, *if* the bags were doing the damage.

They aren't. Not by themselves anyway.

The team of ERS economists in cooperation with the wool industry, ran test lots of wool through scrupulously controlled semi-commercial scale processes, all the way from the shearing to the final weaving and dyeing.

No burlap scraps or other rags or strings were allowed near the sheep pens. No tags or dungy locks were gathered into the sheared fleece. The wool was packed and shipped in special rubber treated burlap bags. These test lots were stored separately in the warehouses and carefully protected from airborne fibers or trash. At the processing plant, the rooms were super-cleaned before the test lots were handled.

When the wool was processed and dyed, it was examined for the telltale signs of jute fiber contamination. At first glance—and even at second glance with a low-power magnifying glass in hand—it looked like the test bags were still causing the trouble.

Some of the 300 defects examined closely in each fabric lot looked like jute. But when the defects were submitted to analysis in the Department's laboratories it was a different story. Most of the fiber type defects turned out to be from hay or other members of the darnel family.

The special containers are useful, but only when the wool they hold is protected from grass and hay, long before it is bagged. *(17)*

Market Spreads Decrease for Eggs But Rise for Fryers During 1962

Farm-retail price spreads in the United States decreased 5 per cent for eggs last year but increased about 4 per cent for frying chickens. From 1961 to 1962, farmers received 6 per cent less for eggs and retail stores sold eggs 6 per cent cheaper.

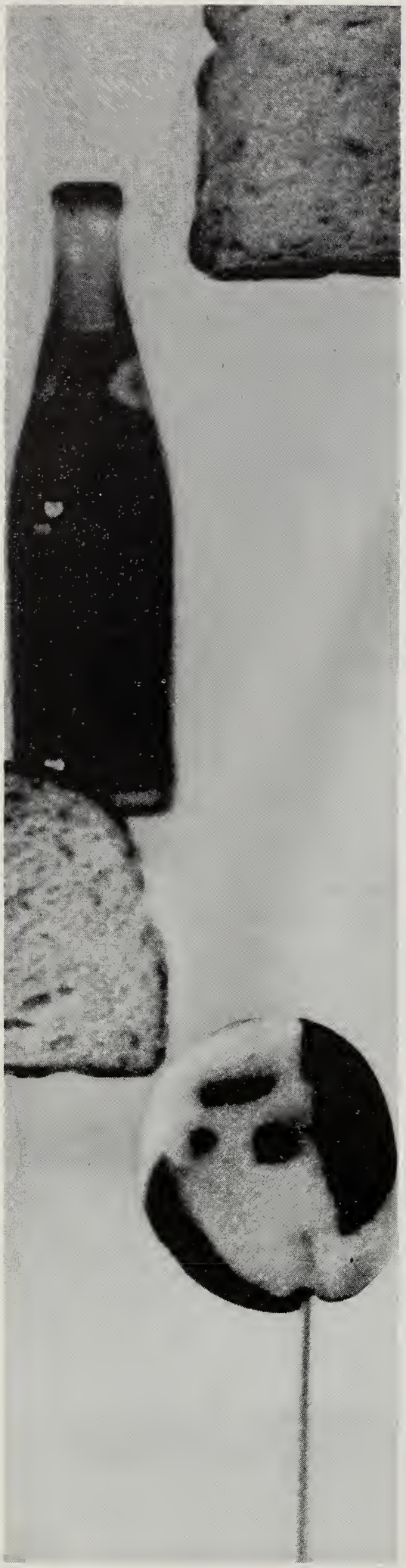
Increased supplies resulted in the lower egg prices last year. Civilian per capita consumption —324 eggs—was the lowest recorded in 20 years, but down only slightly from 1961.

Retail prices for frying chickens in urban areas rose over 2 cents a pound and farm values increased 1.5 cents in 1962.

Even though broiler production reached the highest total on record, fryer prices were higher last year than in 1961.

While the consumption of fryers was up, the per capita consumption of more than 25 pounds last year was the same as in 1961.

Increased exports and government purchases helped move the larger volume of fryers at higher prices than a year earlier. *(18)*



Bakers, confectioners and beverage makers are the target of increased competition among industrial sweeteners

SWEETS COMPETE

Sugar, Dextrose, Corn Sirup Lead As Sweeteners for Baking Industry

Of the three main sweeteners used by the baking industry, each is first in a different way.

Sugar is first in amount used. In 1961 the industry took 1,077,000 tons of it. Dextrose was second, 199,000 tons; and corn sirup third, 90,000 tons.

Dextrose is first in percentage of its total production going into bakery products. In 1961 the baking industry took about 50 per cent of total dextrose production, 12 per cent of the sugar and 10 per cent of the corn sirup.

Corn sirup is first in rate of increase of use. As sirup prices declined relative to sugar prices from 1952 to 1961, the industry upped its use of corn sirup an average 7.1 per cent each year. Use of sugar increased 4.4 per cent a year, dextrose an annual 2.1 per cent.

The competitive position of sweeteners used in the U.S. baking industry from 1952 to 1961 has been appraised in a recent study by the Economic Research Service. Considered part of the baking industry were all plants that turned out baked goods, cereals and allied products.

Some of the researchers' findings:

—Although bread, rolls and other bakery items that require yeast are still the most important products of the industry, production of items not using yeast is increasing more rapidly. This explains, in part, the low rate of growth in dextrose uses.

—The increased use of corn sirup displaced a considerable part of the sugar in items made without yeast.

—By 1966, if recent trends continue, the baking industry will consume about 1,600,000 tons of sweeteners. Of this 81 per cent will be sugar, 13 per cent dextrose and 6 per cent corn sirup.

—Bakers in the North Central states used nearly 40 per cent of all sugar used by the trade.

—Honey, molasses, maple sugar and sirup were used in small quantities by the industry—but more for flavor than sweetening. *(19)*

Sugar Ahead for Making Beverages But Noncaloric Sweeteners on Rise

Americans are an increasingly thirsty and calorie-conscious people.

From 1954 to 1958, the output and, presumably, the intake of soft drinks increased some 12.5 per cent. A small but steadily rising percentage of the pops and colas and ades are made with noncaloric sweeteners.

The national zest for dieting is not, however, the only reason the use of noncaloric sweeteners is on the rise. They are frequently cheaper for the manufacturer of soft drinks. The relatively high price of sugar has helped to push many a manufacturer into using noncaloric sweeteners for his beverages.

Though few statistics are available, trade sources estimate that the production of noncaloric soft drinks leaped from a mere 500 cases in 1950 to 25 million cases in 1959. Their production has been increasing ever since.

Once the beverage manufacturer has made the switch to noncaloric sweeteners, he may be lost for good as a market for sugar.

Manufacturers, less than eager to tamper with their recipes, would be slow to return to sugar once the change has been made. And with price on the side of the non-caloric sweeteners, the beverage makers would be even more reluctant to go back to using sugar.

These observations are from the latest in a series of studies of sweeteners used by food processors. The report concentrates on the sugars and other sweeteners used by the beverage industry, including manufacturers of soft drinks, malt, malt liquors, distilled liquors and flavorings.

Sugar is still the leading sweetener used by the industry. About 95 per cent of all caloric sweeteners (sugar, dextrose and corn sirup) used by the beverage industry from 1952 through 1961 was sugar. In 1961, beverage manufacturers used about 13.5 per cent of all sugar consumed in the country.

If sugar is important to the beverage industry, the industry is equally important to the sugar manufacturer. Beverages took 25 per cent of the sugar delivered to industrial users in 1961.

The makers of soft drinks and flavorings together increased their use of sugar from 965,000 tons in 1954 to 1,066,000 tons in 1958, an increase of 10 per cent. And while the percentage increase is smaller than for the beverage industry as a whole, the total volume used is far larger. *(20)*

Candy Makers Take One-Third of All Corn Sirup Consumed, But Sugar Is Leading Sweetener for Confectionery Industry

Confectioners use more corn sirup than any other food industry in the United States. They account for more than one-third of U.S. consumption of corn sirup. Most of it goes into candy.

The confectioners also use nearly one-tenth of the sugar and 6 per cent of the dextrose consumed in the country. The group includes makers of candy, candied fruits, chewing gum, and chocolate and chocolate products.

Sugar is the leading sweetener for the industry, with deliveries amounting to more than twice the total for corn sirup in 1961. Manufacturers of confections and related products took 842,000 tons of sugar in 1961; they took 326,000 tons of corn sirup. Deliveries of dextrose for the year amounted to 22,000 tons.

In all, some 1.2 million tons of sugar, corn sirup and dextrose were shipped to the confectioners in 1961. It was an increase of 242,000 tons over 1952.

Sugar has increased its share of the market slightly in the past 10 years. In 1952, sugar amounted to 68.2 per cent of deliveries to confectioners. The percentage was 70.8 per cent in 1961. In the same period, the deliveries of corn sirup dropped from 29.9 per cent of the total to 27.4 per cent. Deliveries of dextrose hovered around 1.8 per cent of the total throughout the decade.

The percentages reflect a shift in the relative importance of various types of confections. The biggest proportion of corn sirup goes into hard candy and the output of hard candy hasn't increased as fast as other items, especially chocolate products. And reports from manufacturers indicate an increasing use of corn sirup in products that have traditionally used little or none of this sweetener.

The price of sweeteners in general is an important part of the cost of manufacturing for the confectioner, though short-term price changes of one or more sweeteners rarely cause a shift from one to another. Long-run changes are much more likely to induce shifts in the use of sweeteners. *(21)*

Farm-Retail Spread Up 3 Per Cent For Foods in Market Basket Series

Charges for marketing farm food products in the first three months of 1963 reversed the usual slight seasonal drop at this time of year.

The spread between what farmers get and what consumers pay for a "market basket" of farm foods was $680 (annual rate), up 3 per cent from the last quarter of 1962.

This was the largest quarter to quarter change since the 4 per cent jump from the first to second quarter of 1958.

Most of the increase was due to higher marketing charges for meat products, fruits and vegetables and bakery goods.

Charges for marketing fats and oils went down, while other product groups cost about the same as in the last quarter of 1962.

At $400 (annual rate), the total farm value of "market basket" products was 2 per cent under the preceding quarter, 3 per cent below a year earlier.

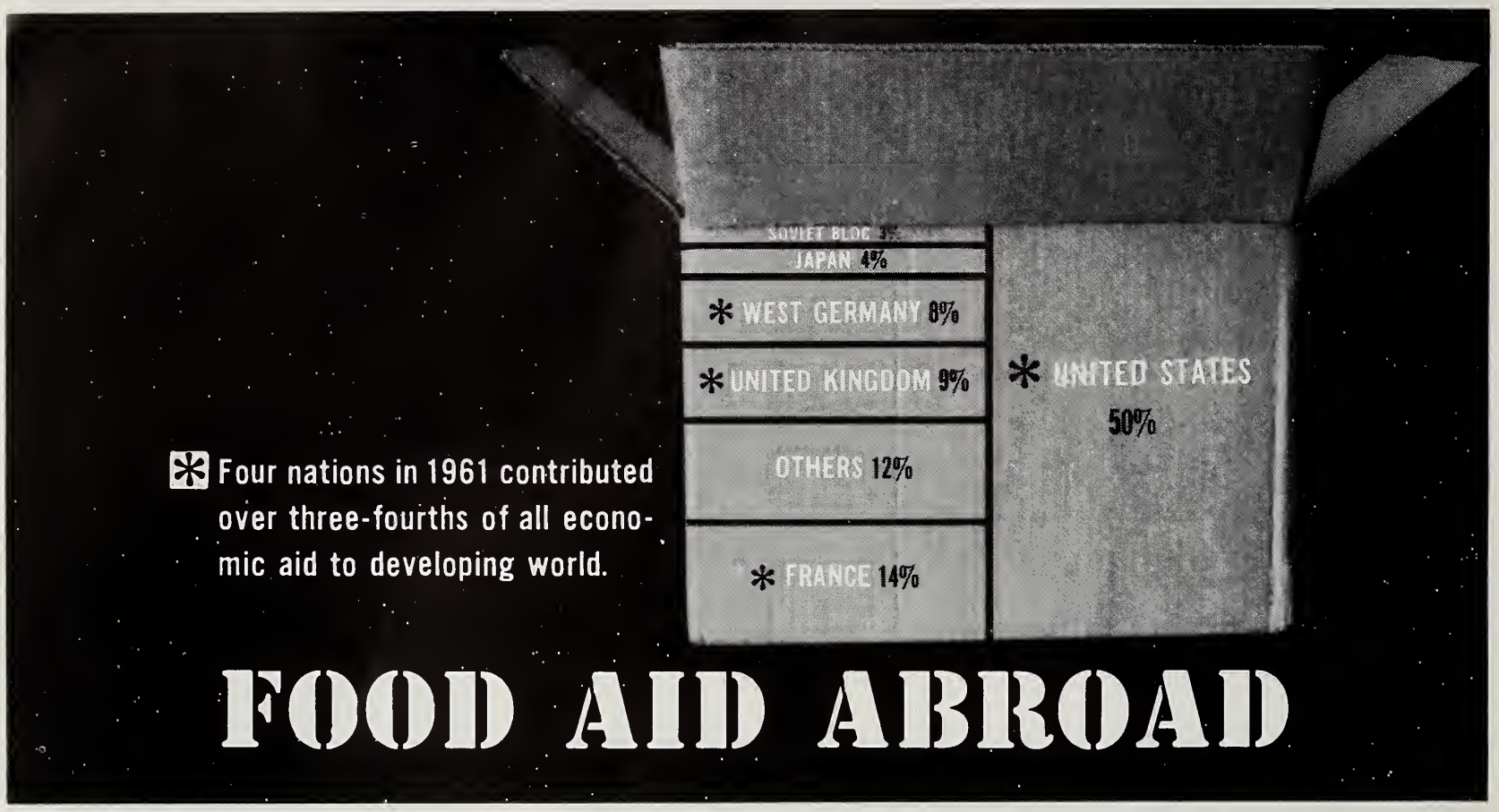
Lower prices for beef cattle, hogs and fluid milk were the chief causes of decline in farm value.

Farmers got 37 cents of the dollar consumers spent for domestic farm foods in retail food stores in the first quarter of 1963, compared with 38 cents in the preceding quarter and 39 cents in January-March 1962.

At the other end of the marketing system, the retail cost of the "market basket" increased to an annual rate of $1,080 or 1 per cent above the last three months of 1962.

Although meat was cheaper at retail, the winter freeze pushed up prices of fresh fruits and vegetables and caused most of the price increase in retail food stores.

The "market basket" is made up of the average quantities of farm produced foods bought at food stores in 1952 by a moderate income, urban family. *(22)*



A hundred years ago the American farmer helped his homesteading neighbor build a house, raise a barn and clear the land. Year by year such mutual assistance helped to push the frontier west.

In the same tradition, the United States is today using the abundant production of American agriculture to help push back the frontier of poverty and hunger on which a third of the world's population still lives.

Repeatedly in the last 15 years or so U.S. food and other economic aid have contributed to the rebirth of war-torn economies, notably in Western Europe, Greece and Japan. One result of this economic upsurge has been larger commercial markets for U.S. farm products.

Now we are trying to help Latin America, Africa, the Middle East and Asia. It's impossible to put a dollar value on the greater political stability that a sound economy and higher level of living bring to a country. But we can measure our contribution in terms of increased trade.

India, for example, receives more U.S. agricultural aid under Public Law 480 than any other country. The Indian income per capita in 1962 was only $84. But the economy is growing. And India has been able to step up its commercial purchases from the United States in the last three years. India bought $11 million more in U.S. farm products in 1961 than in 1960.

Similarly, studies of our commercial trade with such countries as Israel, South Korea, Egypt and Peru indicate that our government-sponsored shipments have not hurt gross dollar sales.

In the 10 years ending in June 1962, net U.S. foreign economic aid from public sources totaled $25 billion. This does not include $26 billion in military assistance, an indirect boost to a country's economy, nor the sizable contributions to economic development abroad made by private institutions in the United States. The $25 billion does include agricultural aid, both technical help and food, which has become an increasingly large part of our government program.

In the 1955-62 period, we shipped abroad about $2 billion in farm products under the Mutual Security Act. But the bulk of our public shipments, over $9 billion, were under P.L. 480.

Passed in 1954, P.L. 480 says that foreign currencies we earn by selling U.S. agricultural goods to dollar-short countries can be used for several purposes:

—To help develop new export markets for U.S. farm products.

—To buy military goods and services for the common defense of both countries.

—To finance the purchase of goods for friendly nations.

—To make grants and loans that help a country promote balanced economic growth.

—To pay part of U.S. expenditures in the country.

—To help finance international educational exchange.

Sales for local currencies are provided under Title I of the act. Title II permits direct grants to governments, voluntary agencies or the United Nations for famine, disaster relief, child feeding and economic development. Title III

is also a direct grant provision, making food available for distribution through such private relief agencies as CARE and religious organizations. Title IV provides for the purchase of U.S. farm products on long-term credit to be repaid in dollars.

For several years now some two-thirds of all P.L. 480 shipments have been Title I sales for local currency. Since fiscal 1958 these exports, mostly wheat and flour, cotton, fats and oils, have run around $1 billion a year.

Most of the money we get from Title I sales has been turned over to the recipient country in the form of loans and grants to help finance economic development. Such projects can't be well planned on a year to year basis, so we have extended Title I agreements from two years to three and even four years. So far we have signed four-year agreements with India and Pakistan.

In fiscal years 1955-62 some 60 per cent of all Title I commodities went to six countries: Spain, Yugoslavia, Poland, Turkey, Pakistan and India. India alone received 22 per cent of the total.

Yet India, because of the size of its population, got an annual average of only 50 cents per person in fiscal 1955-61. By contrast, Israel, with far fewer people, received more per capita than any other country—$11.45. Other large per capita recipients were Iceland, $11.20; Uruguay, $5.92; Yugoslavia, $2.99; and Poland, $2.91.

What U.S. farm products shipped under Title I have meant to underdeveloped countries can be seen in Colombia. P.L. 480 pesos, for instance, have met all local costs of bringing electricity to the Cauca Valley, probably the country's richest agricultural area. Other P.L. 480 funds have been used in reclamation projects that increased land use on some 42,000 acres. Another 44 million pesos have gone toward building chemical fertilizer plants that greatly increased Colombia's production of fertilizer.

Title II shipments—mostly for emergency relief — held fairly steady until fiscal 1961 when they shot up by 80 per cent over the previous year. Although most school lunch programs are handled by voluntary relief agencies under Title III, Title II lunch programs, previously successful in Italy and Japan, have been launched in Brazil, Peru and Tunisia.

Funds from the sale of Title II food have also been used in such countries as Tunisia to pay part of the wages of rural workers on special development projects. And since 1960 Congress has authorized use of Title II as well as Title I funds for such projects as construction of schools, roads and

FARM PRODUCTS COMPRISE NEARLY HALF U.S. ECONOMIC AID

Net assistance	1956	1959	1960	1961
	Million dollars			
U.S. economic aid	2,226	3,253	2,770	2,711
Farm commodity aid	1,013	942	1,269	1,324
Public Law 480	561	796	1,124	1,158
Mutual Security Act	452	146	145	166
	Per cent			
Public Law 480 as per cent of U.S. economic aid	25	24	41	43
Farm commodity aid as per cent of U.S. economic aid	45	29	46	49

WHEAT AND FLOUR LEAD P.L. 480 EXPORTS

(Authorized programs July 1, 1954-December 31, 1962)

Program	Wheat and flour	Dairy products	Cotton	Fats and oils	Rice	Coarse grains	Other	Total
Public Law 480:	Million dollars							
Title I, export market value	4,577	94	1,127	907	476	496	337	8,014
Title II, CCC cost	636	106	19	48	52	153	7	1,021
Title III, donations, CCC cost[1]	455	1,180[2]	—	76	90	132	19	1,952
Title IV, export market value[3]	25	1	35	15	11	8	6	101
Total value	5,693	1,381	1,181	1,046	629	789	369	11,088[4]
	Per cent							
Per cent of total	51	12	11	9	6	7	4	100

[1] Dollar-value breakdown of Title III, barter, is not available. [2] Almost half this figure represents nonfat dry milk. [3] July 1, 1961—December 31, 1962. [4] Consists chiefly of tobacco, $268 million under Title I; and beans, $26 million under Titles II and III.

irrigation canals in Ecuador as well as schools in rural villages of Bolivia.

Title IV sales on long-term credit are relatively new. Since they were authorized in 1959, 10 countries, mostly in Latin America and Africa, have signed agreements totaling $123 million.

While the United States in 1961 provided half of all economic aid, it was by no means the only contributing nation. France accounted for 14 per cent of all economic aid; the United Kingdom, 9 per cent, and West Germany, 8 per cent. Japan also increased its assistance program that year. The Sino-Soviet bloc stepped up aid too, but actual deliveries continued to fall short of commitments.

Our economic aid program is a telling indicator of the scale of the American economy. Despite the size of the program, it represents only 0.6 per cent of our gross national product. By comparison, France spends 1.5 per cent; Portugal, 1.3 per cent; Belgium, 0.8 per cent; and West Germany, 0.7 per cent. The first three countries, however, channel most of their development funds to past or present dependent territories, while the bulk of West Germany's foreign assistance is in short-term commercial loans.

Many donor governments are now coordinating their aid programs with one another and with those of private institutions. Last year, for example, members of the Organization for Economic Cooperation and Development got together on their aid programs to Greece and Turkey. Among others, participating members were the United States, Canada, the United Kingdom, West Germany, Italy and France. More programs are being developed through the United Nations, too.

Through P.L. 480 and other aid programs we can assist emerging nations. But the chief responsibility for economic progress rests with the country itself. *(23)*

GOVERNMENT EXPORT SHIPMENTS OF MAJOR COMMODITIES EXCEED DOLLAR SALES ONLY FOR WHEAT, RICE AND NONFAT DRY MILK

(July-December 1962)

Commodities	Farm exports under P.L. 480 and P.L. 87-195[1]	Farm exports sold for dollars[2]
	Thousand dollars	
Wheat	268,772	157,097
Wheat flour	50,745	34,558
Corn, except seed	32,404	201,927
Grain sorghums	7,191	55,172
Barley	11,379	32,409
Rice, milled	37,781	27,635
Cotton, running bale	76,986	143,252
Tobacco, unmanufactured	15,485	229,663
Soybeans	4,212	226,990
Soybean oil	24,806	42,009
Tallow, edible and inedible	6,691	33,708
Milk, nonfat dry	28,937	9,151
Poultry, fresh or frozen	924	30,111
Fruits and juices	110	129,025

[1] P.L. 87-195 provides for sales for foreign currency and economic aid under the Mutual Security Act. [2] Includes shipments with some government assistance, such as export payments in cash or kind, in addition to unassisted commercial sales.

U.S. FOOD AID HELPS YUGOSLAVIA'S ECONOMIC GROWTH

When harvests are poor and food is scarce, food aid can be just as important as dollars.

This is what the Yugoslavs have found out about P.L.480 shipments.

In five of the last 11 years Yugoslavia has had poor harvests, due mostly to drought. Each time U.S. shipments have helped to meet serious food shortages, particularly in the cities.

One result of this aid, as in several other countries, has been to relieve possible government pressure on farmers to make forced deliveries to meet city food needs.

Private farmers hold about 87 per cent of the arable land, but two-thirds of the private farms are too small even to be efficient self-supporting units.

When food is short, Belgrade steps up efforts to bring private farmland into the larger state farms and cooperatives.

P.L. 480 assistance has been important too in enabling Yugoslavia to plan for balanced agricultural development.

Without P.L. 480 wheat, for example, the government would have been under pressure to push wheat production at the expense of corn and other crops. This could have resulted in less efficient use of agricultural resources.

P.L. 480 wheat, replacing much of the locally-grown corn and barley the Yugoslavs used to eat, has helped to upgrade the national diet. Other P.L. 480 foods have given the population a more varied diet.

Some authorities estimate that Yugoslavia has been able to maintain an overall rate of economic growth 10 per cent higher than it could have without foreign economic aid.

The U.S. supplied most of the $1.2 billion in foreign economic assistance from 1951 to 1961. Farm commodities, mostly under P.L. 480, made up about half of the $1.2 billion total. *(24)*

Greece Used U.S. Aid to Rebuild and Expand Economy; Success Should Encourage Other Nations With Like Problems

Greece emerged from almost a decade of war, Nazi occupation and civil strife with its economy disrupted, its people hungry, its treasury bankrupt.

Yet by 1951 production had been restored to prewar levels.

In the next 10 years the gross national product climbed at an average annual rate of 5 per cent. The rampant inflation of the early 1950s was checked and monetary stability was restored. And by 1960 Greece's balance of payments position was greatly improved.

Today Greece is the only associate of the European Economic Community and has special trade concessions more favorable to Greece than to the six full members.

Greece shows what a nation can accomplish—*if* it gets enough help from other countries and *if* it uses this help to advantage.

Greece was the first of Europe's war ravaged nations to ask the United Nations Relief and Rehabilitation Administration (UNRRA) for emergency food aid, of which some 80 per cent was contributed by the United States.

UNRRA stocks supplied some half of all food consumed by the Greek people from April 1945 to the end of 1946.

After UNRRA came the U.S. government assistance programs —the Marshall Plan and Greek-Turkish Aid.

U.S. food shipped under these programs made it possible for Greece to restore the diet of its people to prewar levels more quickly than it could have done the job alone.

And with more food in the markets, the inflationary price spiral that threatened the country's monetary structure as well as the entire private enterprise system was brought to a halt. Food aid also helped Greece regain its prewar productive capacity.

As Greece emerged from the recovery period and began to expand its economy, U.S. economic aid tapered off. Our assistance amounted to only $409 million over fiscal years 1954 to 1962, compared with $1.1 billion from 1945 to 1953.

P.L. 480 shipments of food under Title I, sales for local currency, began in 1955. Closely meshed with our overall program of technical and economic help under the Mutual Security Act, P.L. 480 food represented about 34 per cent of all U.S. aid from fiscal 1954 through 1962.

Shipments of U.S. feed grains under P.L. 480 have helped Greek farmers expand livestock production. Shipments of milk, cheese and other dairy products under Title III donations have helped to improve the diets of many needy families.

And in most cases, P.L. 480 has enabled Greece to utilize foreign exchange more freely to the purchase of industrial and other capital goods that would otherwise have gone for foodstuffs.

About two-thirds of the drachmas we earn from Title I sales are granted or loaned to the Greek government to help pay for economic development projects. The drachma equivalent of $80 million was allocated for specific projects through fiscal year 1962, including roads and bridges, housing, electric power plants, communication and industrial projects.

Greece is trying hard to expand industry, modernize agriculture and raise living standards. All these needs compete for the country's limited foreign exchange.

However, with further improvement in the economy, it is likely that Greece will be a larger commercial market for U.S. farm products despite the possibility of increased trade with the EEC. This is particularly true because of the strong competitive position of U.S. wheat, feed grains and vegetable oils. *(25)*

Double Indemnity

Food supplied under P.L. 480 has many uses. Take Brazil, for example.

—Last summer food riots in Rio de Janeiro left 10 dead and scores wounded.

The government took a number of steps to ease the food shortages. One was to ask the U.S. for more P.L. 480 wheat.

—Helping farmers get established on frontier lands is another little-known use of P.L. 480 food.

Brazil has an immediate program to resettle some 400 families in the poverty stricken Northeast on fertile but undeveloped land, another 200 families in each of the next five years. For the first two years the U.S. has set aside $380,000 under Title II of P.L.480 to provide farmers with enough food at nominal charges to tide them over until their own farms are established. *(26)*

Why Some, Not Others?

Why can such countries as Mexico, Japan and Greece increase farm output 5 per cent or more a year when Pakistan and Chile, among others, can barely keep up with population growth?

To find out, ERS, at the request of the Agency for International Development, is launching an intensive four-year study of the various factors that help or hinder agricultural production in less developed countries.

AID will use the study findings to help plan more effective use of U.S. assistance.

In the first 18 months, ERS foreign specialists will analyze available information on the agricultural output and productivity of 25 to 30 countries. Then researchers will be sent to some 10 to 12 countries for studies in depth of social structures, economic conditions and the level of technology. *(27)*

Report Cites Impact of P.L. 480 Sales on Israeli Economy: More Jobs, Higher Incomes, Increased Capital Formation

Surplus U.S. farm products exported to Israel under Title I, U.S. Public Law 480, stimulated that nation's economy significantly during its phenomenal spurt from 1955 through 1960.

That's the judgment of a group of Israeli economists who studied the matter for the Department of Agriculture.

During the six years, about $152 million worth of surplus U.S. commodities entered Israel via Title I programs. They were paid for in Israeli currency, the basic unit of which is the Israeli pound. The currency generated by the program was spent or invested within Israel.

About three-fifths (by value) of Title I imports into Israel during 1955-60 were food. A little less than two-fifths were feed grains. The little that remained consisted of imports of industrial raw materials, cotton, tobacco and tallow.

The Title I imports brought about measurable increases in employment, investment, national product, income, consumption, savings and exports.

They helped stabilize prices.

A major contribution: The imports were responsible for reducing unemployment. They created permanent jobs for an average of 7,817 persons a year; temporary jobs for 4,450 annually.

Gross national product increased 53 per cent during the six years; 5 per cent of the increase was due to Title I programs.

Gross capital formation during 1955-60 amounted to $2.8 billion. Of this approximately 3.5 per cent or $100 million worth was accounted for by investments of Title I funds.

Israeli pounds were used mostly to finance industry and for generation of power. Only a small part of them went into agricultural projects.

Probably the most important direct effect of Title I imports on agriculture was a big assist to the livestock industry. This expanded remarkably in the six years during which Title I imports provided a steady supply of feed grains—about 190,000 tons a year—at stable prices.

With more animal products available, diets have improved. People are eating less cereal and fish, more meat and eggs as well as fresh fruits. *(28)*

Soviet Union Shifts Trade Patterns As Red China Drops Food Exports

A faltering agriculture in Red China. Cuba's rapid move into the Soviet orbit. The USSR's need for industrial machinery and equipment from Western Europe.

These are some of the factors that have changed Soviet trade patterns considerably in the last few years.

Red China, for example, had long been the major supplier of farm products to the Soviet Union. Severely hurt by crop failures and farm mismanagement, however, Peiping wasn't able to meets its commitments to the USSR in 1960 and 1961, the last years for which trade figures are available.

As a result, Soviet imports of farm products, which usually account for 22 to 28 per cent of total imports a year, would have declined substantially except for greatly increased purchases of raw rubber from Malaya in 1961 and sugar from Cuba in 1960 and 1961.

Largely because of China's farm plight, the Soviet Union, a net importer of meat and dairy products in the mid-1950s, has become a net exporter.

Imports from China dropped from a peak value of 72 million rubles in 1958 to less than 2 million rubles in 1961. Trying to offset this decline, the Kremlin stepped up purchases from Hungary, Bulgaria and Poland. But these imports weren't enough to balance continued Soviet exports of meat and dairy products to East Germany and Czechoslovakia.

Vegetables and most fruits, formerly supplied by Red China, now come primarily from Bulgaria while non-bloc countries furnish most Soviet imports of citrus fruits, dates and figs.

Red China's failure to supply vegetable oils and oilseeds has hit the Soviets hard. Alternate sources both inside and outside the bloc have not made up the deficit. Soviet imports of oils dropped from 71,600 metric tons in 1959 to 58,000 in 1961; seeds from 715,200 metric tons to 90,200.

Today it looks like Red China has little chance to regain its former position as chief supplier of farm products to the Soviet Union.

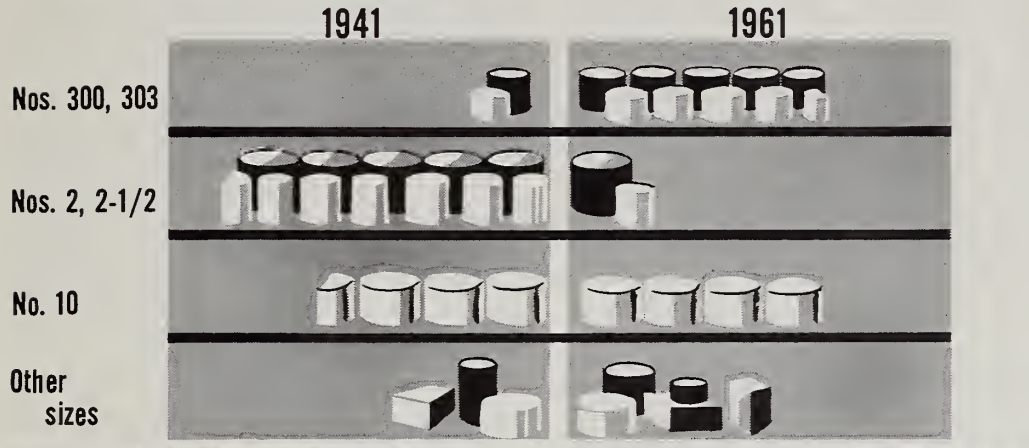
Since Cuba joined the communist bloc, Castro has had to barter sugar for virtually everything he gets from the Soviet Union. Soviet imports of Cuban raw sugar jumped from 132,500 metric tons in 1959, first year of the Castro regime, to 1.5 million metric tons in 1960 and 3.3 million in 1961.

Production problems have since reduced the Cuban sugar crop and presumably stemmed though not stopped the flood of raw sugar going to the Soviet Union.

The Soviets badly need industrial equipment from Western Europe and other non-bloc areas. But the ruble is not convertible, even within the bloc, and the difference between exports and imports must either be balanced over time or the imbalances must be settled in gold, hard currencies or long term credits.

To avoid the outflow of gold, the Kremlin will continue to do everything it can to exchange agricultural products for the West's industrial goods. *(29)*

CANNERY ROW: More little cans and big cans—they've been climbing in popularity as containers for our processed vegetables since World War II. The middle-size cans are still with us for some vegetable items like pumpkin, sauerkraut and squash, but the 2- to 3-serving size and the large institutional cans now hold most vegetables.



CANS CHANGE OVER THE YEARS

Big cans. Tall cans. Small cans. With the available sizes, which cans get the vegetable pack?

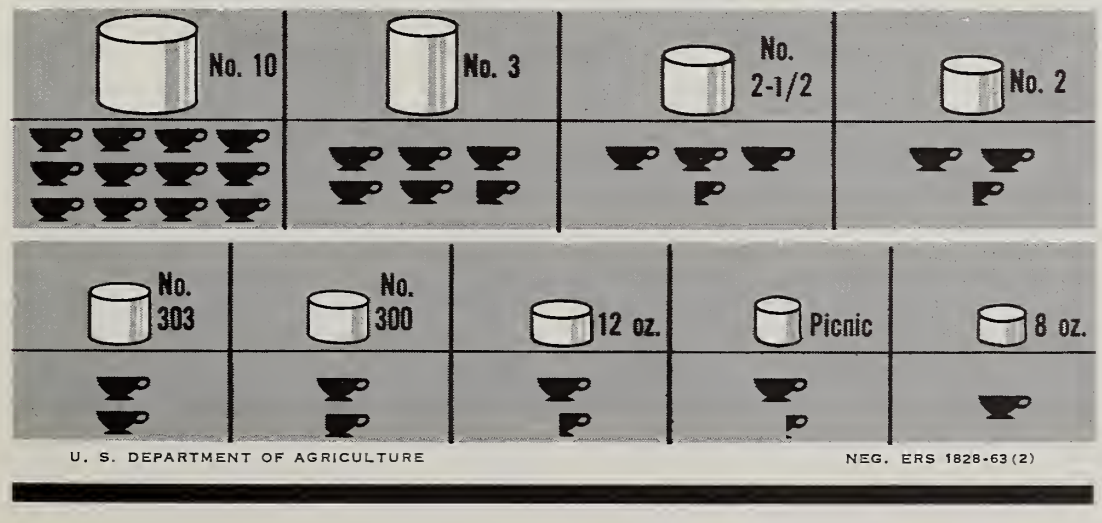
The answer is: more and more of the little cans—and the large institutional sizes too. More vegetables go into them and less into the in-between-size cans that came home from the store 20 years ago.

Around the end of World War II, the No. 2 can, which holds about two and a half cups, took most of the space for canned vegetables on the grocer's shelves. About three-fourths of the processed snap beans, sweet corn, lima beans and green peas came packed in this size. By the mid-1950s, the amounts of these vegetables in No. 2 cans were almost nil.

During this same period, the No. 303 and No. 300 cans took over. Now, about 60 per cent of our canned snap beans, sweet corn, lima beans and peas are packed in two-cup No. 300 and one-and-three-quarter-cup No. 303 cans compared to 10 per cent in the 1940s. Almost two-thirds of the canned beets we buy comes in 303 cans; less than half of the asparagus, spinach and tomatoes is packed in 303s and 300s.

The large restaurant or hotel size No. 10 can that contains 12 to 13 cups has also gained as a container of snap beans, sweet corn, lima beans and green peas. More pumpkin and squash and tomatoes are put in this size compared to pre-World War II. The No. 10 can has lost a little to the No. 2½ size as the most used size for tomato pulp and puree, but the bulk of the processed crop is still sold in the big cans. *(30)*

NO MORE GUESSWORK—on can sizes anyway. Here's a rundown of sizes you're likely to use and the number of cups they contain. (Keep in mind quantities vary with the product.) Most of these sizes are used for a variety of fruits and vegetables but some have special uses. The 12-ounce size is used largely for vacuum-pack corn; the picnic can commonly holds condensed soups.



Orange Juice Prices Show Jack Frost Is Still Around Months After Freeze

Remember the big freeze in Florida last winter?

We pay more for frozen orange juice because of it.

ERS economists traced price rises to growers and processors and made a week by week check of 24 retail stores in an eastern metropolitan area.

They found, first, that prices received by Florida growers for fresh oranges went up immediately after the freeze. Oranges for processing rose about two weeks later, after most of the salvaged fruit had been rushed to processors. By March, processing oranges that sold at $1 a box before the freeze were up to $2.94.

Processors' prices to retailers also rose right after the freeze. The pre-freeze price of $1.25 for a dozen six-ounce cans of concentrate (unadvertised brands) climbed to $2.55 by March. Similarly, two leading advertised brands increased from $1.72 to $2.74.

Retail stores raised prices about a week after processors. By March their average price for a six-once can (advertised brands) that sold for 21 cents before the freeze was up to 31 cents. *(31)*

Changes in the Farm Price of Beef Are Slow to Appear in Retail Store

Last winter the price of live steers dropped sharply. But it was eight weeks before these reductions showed up in the retail prices of beef.

As late as April, Secretary Freeman said: "We are aware that retail prices did not respond as quickly as live cattle prices in their early winter downturn."

Further, the Secretary called on retailers "to reflect the reduction of live animal prices to consumers and to continue strong merchandising efforts for beef and pork in an effort to expand consumption in line with larger meat supplies."

Because retail prices are slow to adjust to changes in live steer prices, housewives don't see the severe price swings that affect the livestock industry.

ERS economists have studied five periods since the Korean War when livestock prices fluctuated widely. In each case, retail prices didn't go up as fast or as far as prices of live steers. They didn't fall as fast or as far either.

Since it takes 2.25 pounds of steer to make one pound of a retail cut of beef, a $1 per cwt. drop in steer prices can't be compared directly with a 1 cent per pound drop in retail beef prices. So the economists worked out a series of adjusted retail prices that made it easier to compare price changes.

When steer prices increased during the five periods studied by an average 10.8 cents per retail pound, prices of beef in retail markets went up only 7.7 cents.

When steer prices fell an average of 15 cents per retail pound during the five periods, retail prices dropped only 8.9 cents.

Last year's price swings followed the same pattern. From July to November steer prices rose an average of 10.6 cents per retail pound. But retail prices increased only 5.9 cents.

Then came the winter price break. From November to mid-March steer prices declined 15 cents per retail pound. Retail prices, however, fell only 6.9 cents.

The study points out that live steer prices tend to "overadjust," going too high and falling too low in relation to changes in supply. Retail prices, on the other hand, tend to "underadjust." *(32)*

U.S. CONSUMPTION OF MEAT 1951 AND RECENT YEARS

Year	Per Capita Consumption				
	Beef	Veal	Lamb and mutton	Pork	Total
	Pounds	Pounds	Pounds	Pounds	Pounds
1951	56.1	6.6	3.4	71.9	138.0
1960	85.2	6.2	4.8	65.2	161.4
1961	88.0	5.7	5.1	62.2	161.0
1962[1]	89.0	5.5	5.1	64.0	163.7
1963[2]	91.0	5.2	4.5	64.5	165.0

[1] Preliminary. [2] Forecast.

U.S. Per Capita Meat Consumption Will Increase Slightly This Year

Americans like meat—and to prove it, we'll eat about 165 pounds per capita this year, according to ERS forecasts. That's about 27 pounds more than we ate in 1951.

Per capita consumption of beef is expected to rise to some 91 pounds this year, a jump of almost 35 pounds from 1951 and two pounds more than last year.

We are eating about seven pounds less pork, however. Pork consumption per capita in 1951 was about 72 pounds compared with this year's expected 64.5 pounds.

Per capita consumption of veal this year will be 5.2 pounds compared with 6.6 pounds in 1951.

In 1951 we ate 3.4 pounds of lamb and mutton per capita. This year we'll probably eat about a pound more. *(33)*

8.4 Billion Lbs. of Fats and Oils Were Used by Americans in 1962

Checked your diet lately? If you were an average consumer, there were more fats and oils in it last year.

Use of food fats and oils in 1962 averaged 46 pounds (fat content) per person, 0.7 pound more than in 1961. Altogether, civilians in the U.S. tucked away a record 8.4 billion pounds of food fats and oils during 1962—compared with 8.2 billion a year earlier.

Retail prices for fat and oil products were 2 per cent lower, on the average, than in 1961. This probably provided some of the incentive to step up 1962 purchases.

Per capita consumption of butter and margarine dropped somewhat last year. Combined use of table spreads averaged 16.5 pounds (actual weight) per person, down 0.4 pound from 1961. Of this total, butter accounted for 7.2 pounds. Per capita use of butter was 7.4 pounds a year earlier.

Margarine consumed per person failed to increase over the previous year for the first time since 1955. On the average, each American used 9.3 pounds during 1962, 0.2 pound under 1961.

Combined use of cooking fats increased a little last year. Consumption in 1962 was 20.7 pounds per capita compared with 20.5 pounds in 1961. While use of shortening was at a new high of 13.4 pounds, the use of lard dropped to a record low of 7.3 pounds.

The biggest change in our fat and oil diet was in the use of other edible oils, mostly cooking and salad oils. In 1962, per capita use averaged 12.7 pounds of these products—2.2 pounds more than in 1961.

Americans are consuming more of the liquid cooking and salad oils —"as is" and in such prepared foods as mayonnaise, salad dressings, potato chips, frozen french fries and bakery food mixes. *(34)*

RECENT PUBLICATIONS

The following publications are issued by the Economic Research Service and cooperatively by the state universities and colleges. Unless otherwise noted, reports listed here and under Sources *are published by ERS. Single copies are available free from the Division of Information, OMS, U.S. Department of Agriculture, Washington 25, D.C. State publications may be obtained from the issuing agencies of the respective states.*

THE AGRICULTURAL PICTURE IN U.S.S.R. AND U.S.A. Lazar Volin, Regional Analysis Division. ERS-Foreign 27 (slightly revised April 1963).

The agricultural sectors of the Soviet and U.S. economies present a striking contrast in behavior: In the Soviet Union there is an officially acknowledged stagnation in agricultural production and shortages of food, particularly of animal products; in the United States a continuing high level of agricultural production and abundance of food exist. This report discusses the complex of natural and institutional factors in explaining the difference in behavior in the agricultural economies of the two countries.

AGRICULTURAL DIVERSIFICATION AND ECONOMIC DEVELOPMENT IN THAILAND—A CASE STUDY. Lester R. Brown, Regional Analysis Division. Foreign Agricultural Economic Report No. 8.

While other less developed countries in Asia have been busily formulating multiyear development plans, Thailand has proceeded without one. It was only in late 1961 that a six-year plan was adopted. Despite the lack of plans, farm income, at constant prices, climbed 60 per cent during the past six years, with total exports —almost entirely agricultural— having risen at a comparable rate. Thailand has traditionally been a rice monoculture, but during the past decade there has been a rapid growth in output of other crops, particularly corn, cassava and kenaf.

PILOT FOOD STAMP PROGRAM—ITS EFFECT ON RETAIL FOOD STORE SALES IN FAYETTE COUNTY, PA., AND MCDOWELL COUNTY, W. VA. Nick Havas and Robert E. Frye, Marketing Economics Division. Agricultural Economic Report No. 29.

A Food Stamp Program was initiated by the Department on a pilot basis in eight selected areas of the country in mid-1961. It was to test out such a program for helping needy families to obtain more nearly adequate diets and to assist in alleviating problems in our farm economy resulting from the current abundance of production. This report is a part of an overall research effort to evaluate effects of the program on food consumption, nutritional intake of participants, food retailing and farm income.

MARKETING WESTERN FRUITS AND VEGETABLES — LONG–TERM OUTLOOK. Dale G. Stallings, Marketing Economics Division. ERS-77.

The long-term outlook for marketing fruits and vegetables from the 11 western states is for continued growth. Total consumption of fruits and vegetables in the United States is projected to grow by at least a third from 1960 to

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Speech (S); published report (P); report in process (M); special material (SM).

1975. The western region now supplies about 65 per cent of the noncitrus fruit, 45 per cent of the vegetables, and 28 per cent of the citrus fruit. Increases in the proportions of noncitrus fruits and vegetables and a small decrease in the proportion of citrus supplied by the West are in prospect.

EXURBAN DEVELOPMENT IN SELECTED AREAS OF THE APPALACHIAN MOUNTAINS. Hugh A. Johnson, J. Raymond Carpenter and Henry W. Dill, Jr., Resource Development Economics Division. ERS-111.

In northwestern Virginia and adjacent areas of West Virginia, decided changes in the way land is used are taking place. Farm land is being taken over for recreational developments. Similar changes are occurring in other parts of America as more and more urban dwellers take advantage of opportunities for recreation. Land use changes occurring on a sample area of approximately 15,400 acres from 1937 to 1962 involved 2,147 acres, or about 14 per cent of the entire area studied. There was a distinct decline in agricultural use of land and a rise in urban-oriented interests.

APPRAISAL OF TREATED BAGS FOR SHIPPING WOOL. Frederick J. Poats, Marketing Economics Division. ERS-110.

This report presents the results of concerted efforts of the wool industry and USDA to find the answer to the problem of jute fiber contamination of wool. Regular burlap bags and latex rubber-treated bags were tested for suitability as shipping containers for wool. The results did not justify changing to the rubber-treated bags, because defects still appeared in cloth that was made from the wool shipped in the treated bags. These defects were identified as being from native grasses.

U.S. Papers Issued

In Geneva last February the United Nations held a Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas.

Papers presented by U.S. specialists have now been published as Volume III of the proceedings, entitled *Agriculture—Science, Technology, and Development.*

Subjects include institutional and social aspects of agricultural development, improvements in levels of nutrition, development of land and water resources, crop production and protection.

Copies are available for 75 cents each from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

BRITISH GUIANA—ITS AGRICULTURE AND TRADE. Agnes G. Sanderson, Regional Analysis Division. ERS-Foreign-45.

British Guiana, located on the northeast coast of South America, had a gross national product of $150 million in 1960, agriculture's share being 42 per cent. Per capita income is $250, about average for Latin America. Over half the population depends on agriculture for a living. Sugar and rice are the dominant crops in the economy. Major problems for agriculture are the heavy expenditure needed for land reclamation and upkeep, and the difficulty and cost of transportation.

SWEETENERS USED BY THE DAIRY INDUSTRY — THEIR COMPETITIVE POSITION IN THE UNITED STATES. Roy A. Ballinger and L. C. Larkin, Marketing Economics Division. Agricultural Economic Report No. 30.

Manufacturers of sweetened dairy products used about 4.7 per cent of the total quantity of sugar, corn sirup and dextrose delivered to consumers in the United States in 1961. Changing conditions in the industry, particularly in the competition among sugar, corn sirup and other sweeteners, have created a need for information on probable effects.